



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/647,801 Confirmation No.: 2351  
Applicant: Liotta *et al.*  
Filed: August 25, 2003  
TC/AU.: 1621  
Examiner: Unassigned

Docket No.: 18085.105233 EMU 2010 CON  
Customer No.: 20786  
Title: Sphingolipid Derivatives and Their Method of Use

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

**Transmittal of Information Disclosure Statement**

Sir:

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Respectfully submitted,

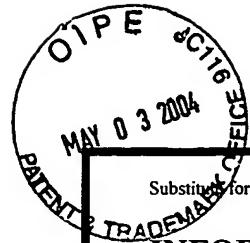
Madeline I. Johnston, Esq.  
Reg. No. 36,174

Date: April 29, 2004  
King & Spalding, LLP  
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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	1	of	4	Attorney Docket Number	18085.105233 EMU 2010 CON
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### U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code (if known)			
	AA	5,103,002	A	Wieland	04-07-1992	
	AB	5,110,987	A	Liotta <i>et al.</i>	05-05-1992	
	AC	5,122,450	A	Feizi <i>et al.</i>	06-16-1992	
	AD	5,190,876	A	Merrill	03-02-1993	
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	AF	5,430,169	A	Boumendjel <i>et al.</i>	06-04-1995	
	AG	5,440,012	A	Takei <i>et al.</i>	08-08-1995	
	AH	5,459,057	A	Merrill <i>et al.</i>	10-07-1995	
	AI	5,463,092	A	Kumar Raj <i>et al.</i>	10-31-1995	
	AJ	5,488,166	A	Hudlicky	01-30-1996	
	AK	5,518,879	A	Merrill <i>et al.</i>	05-21-1996	
	AL	5,599,914	A	Wiegand Herbert <i>et al.</i>	02-04-1997	
	AM	5,610,040	A	Smeets <i>et al.</i>	03-11-1997	
	AN	5,616,577	A	Nambi <i>et al.</i>	04-01-1997	
	AO	5,635,536	A	Lyons	06-03-1997	
	AP	5,672,693	A	Kawahara	09-30-1997	
	AQ	5,780,441	A	Higa <i>et al.</i>	07-14-1998	
	AR	5,910,425	A	De Boer <i>et al.</i>	06-08-1999	
	AS	5,916,911	A	Shayman <i>et al.</i>	06-29-1999	
	AT	6,010,733	A	Takemoto <i>et al.</i>	01-04-2000	
	AU	6,043,218	A	Dix <i>et al.</i>	03-28-2000	
	AV	6,063,796	A	Yang <i>et al.</i>	05-16-2000	
	AW	6,127,578	A	Merrill <i>et al.</i>	10-03-2000	
	AX	6,610,835	B1	Liotta <i>et al.</i>	08-26-2003	

### FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office <sup>3</sup>	Number	Kind Code <sup>2</sup> (if known)				
	AY	JP	1-93562		--	04-12-1989		
	AZ	EP	0,556,962	A1	Orosz (Rich. Ged. Veg. Gy. RT)	08-25-1993		
	AAA	EP	0,560,267	A1	Beaulieu (Bio-Mega; Boehringer)	09-15-1993		

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				Application Number	10/647,801
				Filing Date	August 25, 2003
				First Named Inventor	Liotta <i>et al.</i>
				Group Art Unit	1621
				Examiner Name	Unassigned
Sheet	2	of	4	Attorney Docket Number	18085.105233 EMU 2010 CON

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		Office <sup>3</sup>	Number			
	BA	EP	0,666,268	A1	Akimoto <i>et al.</i>	08-09-1995
	BB	EP	0,675,112	A1	Hunt (Bristol-Myers Squibb)	10-04-1995
	BC	EP	0,821,068		Rohm & Haas	01-28-1998
	BD	WO	87/02777	A1	Feizi <i>et al.</i> (Res. Corp. Ltd.)	05-07-1987
	BE	WO	95/29189	A1	Al-Obeidi <i>et al.</i> (Selectide Corp)	11-02-1995
	BF	WO	97/26891		Beiersdorf	07-31-1997
	BG	WO	97/47194	A1	Babu <i>et al.</i> (Biocryst Pharm.)	12-18-1997
	BH	WO	97/10817		Univ. Michigan	03-27-1997

<b>OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS</b>						
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				
*	BI	BENNUN <i>et al.</i> , <i>Infect. &amp; Immun.</i> , 57:969-974 (1989).				
*	BJ	BELL, R., <i>et al.</i> <i>Cold Spr. Harbor Sym. Quant. Biol.</i> 53:103 (1988).				
*	BK	BUEHRER, B.M., and BELL, R.M., "Inhibition of sphingosine kinase <i>in vitro</i> <i>J. Biol. Chem.</i> 267(5):3154-3159 (February 15, 1992).				
*	BL	BUEHRER and BELL, <i>Adv. Lipid Res.</i> 6:59-67 (1993).				
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	BO	DESAI, K., <i>et al.</i> , "Fumonisins and fumonisin analogs as inhibitors of ceramide synthase and inducers of apoptosis," <i>Biochem. Biophys. Acta</i> , 1585(2-3):188-192 (December 30, 2002).				
*	BP	FARKAS-HIMSLEY <i>et al.</i> , <i>Proc. Natl. Acad. Sci. (USA)</i> 92:6996-7000 (1995).				
*	BQ	HAKOMORI, <i>J. Biol. Chem.</i> 265:18713-18716 (1990).				
*	BR	HANNUN <i>et al.</i> , <i>J. Bio. Chem.</i> 261:12604-12609 (1986).				
*	BS	HANNUN, <i>J. Biol. Chem.</i> 269:3125-3128 (1994).				
*	BT	HANNUN and OBEID, <i>Trends Biochem. Sci.</i> 20:73-77 (1995).				
*	BU	<i>J. Urol.</i> , 155(5):653A, Abst. 1367 (1996).				
*	BV	JACEWICZ <i>et al.</i> , <i>J. Clin. Invest.</i> 96:1328-1335 (1995).				
*	BW	JEFFERSON, A. and SCHULMAN, H., <i>J. Biol. Chem.</i> 263:15241 (1988).				

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>6</sup>
*	CA	KARLSSON, K. A., <i>Chem. Phys. Lipids</i> , 5:6-43 (1970).		
*	CB	KAWAI, G., <i>et al.</i> , "Stimulatory effect of certain plant sphingolipids on fruiting of <i>Schizophyllum commune</i> ," <i>J. of Biol. Chem.</i> , 261(2):779-784 (1986).		
	CC	KENNEDY, K.J., <i>et al.</i> , "Asymmetric synthesis of non-natural homologues of lysine," <i>Bioorg. Med. Chem. Lett.</i> , 7(14):1937-1940 (1997).		
*	CD	KEUSCH <i>et al.</i> , <i>Infect. &amp; Immun.</i> 63: 1138-1141 (1995).		
*	CE	KOLESNICK, <i>Cell</i> 77:325-328 (1994).		
*	CF	MERRILL <i>et al.</i> , <i>Fungal Lipids</i> (R. Prasad and M. Ghanoum, eds.), CRC Press, Boca Raton, FL (1995).		
*	CG	MERRILL and WANG, <i>Methods Enzymol.</i> , 209:427-437 (1992).		
*	CH	MERRILL <i>et al.</i> , <i>J. Biol. Chem.</i> 261:3764-3769 (1986).		
*	CI	MERRILL & SWEELY, "Sphingolipids: metabolism and cell signalling," <i>New Comprehensive Biochemistry: Biochemistry of Lipids, Lipoproteins, and Membranes</i> , (Vance, D.E. & Vance, J.E., eds.), pp. 309-338, Elsevier Science, Amsterdam (1996).		
*	CJ	MINN, A. J., <i>et al.</i> , <i>Blood</i> 86: 1903-1910 (1995).		
*	CK	MINN, A. J., <i>et al.</i> , <i>Nature</i> , 385: 353-357 (1997).		
*	CL	MORRISON, <i>Biochim. Biophys. Acta.</i> , 176:537-546 (1969).		
*	CM	MUCHMORE, S. W., <i>et al.</i> , <i>Nature</i> , 381: 335-341 (1996)		
*	CN	NILSSON, A., <i>Biochim. Biophys. Acta.</i> 164:575-584 (1968).		
*	CO	Patent Abstracts of Japan, vol. .095, no. 002, (March 31, 1995).		
*	CP	PITTET, D., <i>et al.</i> , <i>J. Biol. Chem.</i> 262:10072 (1987).		
*	CQ	ROBSON <i>et al.</i> , <i>J. Lipid Res.</i> 35:2060-2068 (1994).		
*	CR	SCHMELZ <i>et al.</i> , <i>Journal of Nutrition</i> , 124:702-712		
	CS	SCHMITZ, B., <i>et al.</i> , "Determination of structural elements of the L2/HNK-1 carbohydrate epitope required for its function," <i>Glycoconjugate J.</i> , 11(4):345-352 (1994).		
	CT	SUZUKI, N., <i>et al.</i> , "Farnesyltransferase inhibitors induce Cytochrome C release...," <i>Proc. Natl. Acad. Sci. USA</i> , 95:15356-15361 (December 1998).		
*	CU	THOMPSON, <i>et al.</i> , <i>Biochem. Pharmacol.</i> 56: 591-597, 1998.		
	CV	WADDELL, S.T., <i>et al.</i> , "Chimeric azalides with functionalized western portions," <i>Heterocycles</i> , 43(11):2325 (1996).		
*	CW	WELLS, G. B. and LESTER, R.L., <i>J. Biol. Chem.</i> , 258:10200-10203 (1983).		
*	CX	WILSON <i>et al.</i> , <i>J. Biol. Chem.</i> 261:12616-12623 (1986).		
*	CY	WINICOV, I. and GERSHENGORN, M., <i>J. Biol. Chem.</i> 263:12179 (1988).		

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STATEMENT BY APPLICANT**

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	DA	WIPF, P., and HENNINGER, T.C., "Solid-phase synthesis of peptide mimetics with (E)-alkene amide bond replacements derived from alkenylaziridines," <i>J. Org. Chem.</i> , 62(6):1586-1587 (1997).	
✓	DB	WU <i>et al.</i> , <i>J. Biol. Chem.</i> 268:13830-13837 (1993).	

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

## Title: Sphingolipid Derivatives and Their Method of Use

## **APPOINTMENT OF ASSOCIATE ATTORNEY**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Please recognize the following registered patent practitioners as Associate Attorneys to prosecute the above-entitled application and transact all business in the Patent and Trademark Office connected therewith: W. Scott Petty-35,645; Madeline I. Johnston-36,174; Clark G. Sullivan-36,942; Holmes J. Hawkins-38,913; Steven P. Wigmore-40,447; Michael S. Pavento-42,985; Shane A. Nichols-43,836; Bill Isaacs-44,165; Rebecca J. Kaufman-44,819; Charles Peeler-45,004; Stephanie D. Adams-47,378; Bob Neufeld-48,394; James M. Hannon-48,565; Charles Thorpe, Jr -48,782; Susanne Hollinger-51,811; Natasha Horne Moffitt-53,340; Monte R. Rhodes-54,396; Michael L. Wach-54,517; Brent R. Bellows-54,709; James J.

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Mayberry-P-55,438; all of the firm of King & Spalding, LLP, 45<sup>th</sup> Floor, 191 Peachtree Street, N.E., Atlanta, Georgia 30303, and address all future communication to the firm.

Respectfully submitted,



Sherry M. Knowles, Esq.  
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K&S Docket: 04342.105046 UGA 665 CON1